

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
16 October 2003 (16.10.2003)

PCT

(10) International Publication Number  
**WO 03/085687 A3**(51) International Patent Classification<sup>7</sup>: **H01J 29/07**,  
29/02, H01F 13/00, B05C 11/11Robbinsville, NJ 08691 (US) **GOROG, Istvan** [US/US];  
1275 Wheatland Avenue, Lancaster, PA 17603 (US).

(21) International Application Number: PCT/US03/10014

(74) Agents: **TRIPOLI, Joseph, S. et al.**; c/o Thomson Li-  
censing Inc., 2 Independence Way - Suite 2, Princeton, NJ  
08540 (US).

(22) International Filing Date: 2 April 2003 (02.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/369,920 4 April 2002 (04.04.2002) US(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,  
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,  
UZ, VC, VN, YU, ZA, ZM, ZW.(71) Applicant (*for all designated States except US*): **THOM-  
SON LICENSING S.A.** [FR/FR]; 46, Quai A. Le Gallo,  
F-92648 Boulogne (FR).(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

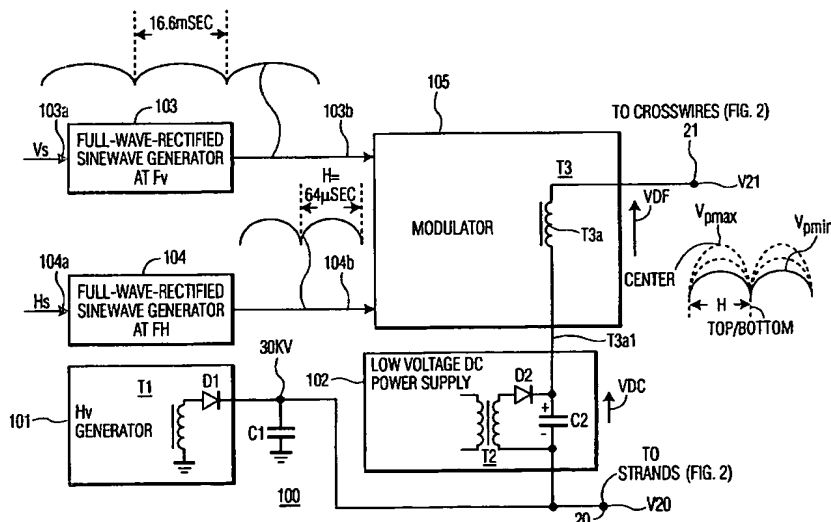
(75) Inventors/Applicants (*for US only*): **NOSKER, Richard,**  
**William** [US/US]; 269 Hawthorne Avenue, Princeton,  
NJ 08540 (US). **WHITE, Allan, Eugene** [US/US]; 421  
North Main Street, Hightstown, NJ 08520 (US). **HEY-**  
**MAN, Philip, Michael** [US/US]; 6 Darvel Drive, RD #4,

Published:

— with international search report

[Continued on next page]

(54) Title: DYNAMIC FOCUS VOLTAGE FOR A FOCUS MASK



(57) Abstract: A dynamic focus voltage generator (21) is provided for a tensioned focus mask (30) of a cathode ray tube (10) of video display. The tensioned focus mask (30) includes spaced apart strands (44) and spaced apart crosswires (46) separated from the strands (44). A synchronizing signal at a horizontal deflection frequency is used for generating a dynamic focus voltage component that varies in accordance with a position of an electron beam on a screen (28) of the cathode ray tube (10). A synchronizing signal at a vertical deflection frequency is used for generating a dynamic focus voltage component that varies in accordance with the position of the electron beam on the screen (28) of the cathode ray tube (10). The time varying voltage components are combined with a direct current voltage component for producing a dynamic focus voltage between the strands (44) and crosswires (46).



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**(88) Date of publication of the international search report:**  
4 December 2003

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/10014

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01J 29/07, 02; H01F 13/00; B05C 11/11  
US CL : 324/500, 404, 71.1; 313/408, 403, 402, 461, 466

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 324/500, 404, 71.1; 313/408, 403, 402, 461, 466

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
None

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
None

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,146,816 A (MORRELL) 27 March 1979 (27.03.1979), see entire document.	1-5
Y	US 4,682,075 A (NELSON et al.) 21 July 1987 (21.07.1987), see entire document.	1-5
Y	US 5,688,328 A (TONG et al.) 18 November 1997 (18.11.1997), see entire document.	1-5
Y	US 5,929,641 A (KUCZER et al.) 27 July 1999 (27.07.1999), see entire document.	1-5

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

16 June 2003 (16.06.2003)

Date of mailing of the international search report

**23 SEP 2003**

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

Jimmy Vu

Telephone No. (703) 306-5451